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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,105	11/30/2001	Cornelius Peter	TRW (AEC) 5987	4403

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EXAMINER

BUI, HUNG S

ART UNIT PAPER NUMBER

2841

DATE MAILED: 05/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/998,105

Applicant(s)

PETER, CORNELIUS

Examiner

Hung S Bui

Art Unit

2841

- The MAILING DATE of this communication appears on the cover sheet with the correspondence address -

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12 is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-10 is/are rejected.
- 7) ☒ Claim(s) 5-6 and 11 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 7-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davidson [US 4,782,240] in view of Tsai [US 6,347,958].

Regarding claims 1-4, 7 and 10, Davidson discloses a housing (figure 1) for circuit breaker device (12) for connection with a battery stud terminal comprising:

- a metallic load-bearing stamped base plate assembly (24);
- a generally parallelepipedal housing (figure 1) formed on the base plate and the base plate extending away from the housing body forming an attachment section.

Davidson disclose the instant claimed invention except for the housing, housing an electronic monitoring device, being formed of plastic surrounding the base plate assembly and the base plate extension forming a cantilevered attachment section.

Tsai discloses a base plate having a cantilevered projection (11) extending out of and partially surrounded by a housing (12) for an electronic battery monitoring device (figure 2).

It would have been obvious to a person having ordinary skill in the art at the time invention was made to use the base plate mounting design of Tsai for the base plate of Davidson for the purpose of facilitating connection to a battery terminal.

It would have been obvious to a person having ordinary skill in the art at the time invention was made that the circuit breaker could have been substituted with an electronic monitoring device for the purpose of ascertaining the battery condition.

It would have been obvious to a person having ordinary skill in the art at the time invention was made to use plastic to form the housing of Davidson for the purpose of protecting against electric shock.

Regarding claim 8, Davidson in view of Tsai disclose the instant claimed invention except for the housing having an open portion with a removable cover (30) being connected to the housing body by interaction of lock-in opening and corresponding support projections.

Tsai further discloses the monitoring device being mounted on a printed circuit board (22) mounted within an open portion of the housing, wherein the housing has a removable cover (30) being connected to the housing body by interaction of lock-in opening and corresponding support projections (figure 2).

It would have been obvious to a person having ordinary skill in the art at the time invention was made to use the cover design of Tsai in Davidson, as modified, for the purpose of facilitating mounting of the cover and protecting the circuit board.

Art Unit: 2841

3. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davidson in view of Tsai as applied to claim 1 above, and further in view of Flickinger [US 4,924,152].

Regarding claim 9, Davidson in view of Tsai disclose the instant claimed invention except for the attachment portion including at least one embossed reinforcement bead.

Flickinger discloses a housing (10) having attachment portions (157, 158) including a reinforcement bead (152).

It would have been obvious to a person having ordinary skill in the art at the time invention was made to add reinforcement bead on to the attachment portion of Davidson in view of Tsai, for the purpose of strengthening the attachment portion.

Response to Arguments

4. Applicant's arguments with respect to claims 1-4 and 7-10 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

5. Claim 12 is allowed.

6. Claims 5-6 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2841

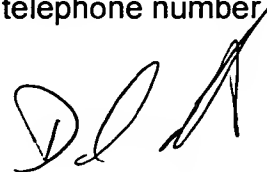
The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not teach or suggest, in the claimed combination, a soldering pin being stamped out from the base plate and being perpendicularly bent upwards inside the housing body.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung S Bui whose telephone number is (703) 305-8024. The examiner can normally be reached on Monday-Friday 8:30AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David S. Martin can be reached on (703) 308-3121. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-0956.



HB
4/30/03

DAVID MARTIN
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